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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,442	08/20/2003	Donald W. Dine	G00351/US	7016
35758	7590	04/27/2005	EXAMINER	
GKN DRIVELINE NORTH AMERICA, INC 3300 UNIVERSITY DRIVE AUBURN HILLS, MI 48326			BINDA, GREGORY JOHN	
			ART UNIT	PAPER NUMBER
			3679	
DATE MAILED: 04/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/644,442

Applicant(s)

DINE ET AL.

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11,12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,7-9,12,14,15 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

*Claim Objections*

2. Claim 1 is objected to because in line 11 the limitation “the tube” should be changed to “the tubular member”.

*Claim Rejections - 35 USC § 102*

3. Claims 1, 7, 8, 11, 12, 14, 15, 18 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiekhaefer, US 2,466,440. Figs. 1-5 show a propeller shaft assembly comprising: a tubular member 1-3; a connecting member 5 fixed to each end of the tubular member; and a support member 6 fixed within the tubular member. Figs. 1-5 show the support member 6 comprises: a central hub 7; and three opposed pairs of radial elements 8 engaging the interior surface 9 of the tubular member, such that the length of the radial elements is less than the length of the tubular member.

4. Claims 1, 3, 7, 8, 11, 12, 14, 15, 18 & 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hickman, US 2,915,306. Figs. 1-4 show a propeller shaft assembly comprising: a tubular member 25, 40; a connecting member 45 fixed to each end of the tubular member; and a support member 36 fixed within the tubular member. Figs. 1-4 show the support member 36 comprises: a central hub 38 and two opposed pairs of radial elements 35 engaging the interior surface of the tubular member, such that the length of the radial elements is less than the length

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of the tubular member. Fig. 4 shows each radial element 35 includes an enlarged end portion (see the feature 44).

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 9 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hickman in view Sparrow, US 2,017,609. Hickman shows all the limitations of the claims except openings formed in the radial elements. In col. 2, Sparrow teaches providing holes 15 in order to alter the weight of tubular insert. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the shaft assembly of Hickman by providing holes in the radial elements in order to provide a means for altering the weight of the support member as taught by Sparrow.

7. Claim 9 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiekhaefer in view Sparrow for the same reason noted immediately above.

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*Allowable Subject Matter*

8. Claims 4-6 & 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda  
Primary Examiner  
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